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W. A. PATON

The BALANCE SHEET

A MAGAZINE FOR
COMMERCIAL TEACHERS

VOL. V NUMBER 2

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CONTENTS

	Page
Modern Cost Accounting	4
A Discussion of the Transcript Problem	13
Popularizing the Private Business College with the School-Going Public	17
Exercises in Bookkeeping	19
State Teachers' Associations	22
Current News	23

EXTENSION COURSES
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Commercial teachers should possess a broad knowledge and a sound conception of accounting principles and procedure, auditing theory and practice, income tax procedure, and law in its relation to accounting.

Ability to interpret financial statements, to devise and install systems of accounts, to prepare income tax returns, to give sound advice on matters involving a correct application of accounting principles, to aid in the organization of a business enterprise—such ability results from the study of accountancy and income tax procedure.

C. B. Wray enrolled January, 1920 and completed the course in August, 1921. In May, 1923, he passed the Georgia examination and became a Certified Public Accountant. He is now Professor of Accounting in Mercer University, Macon, Georgia.

Rodney P. Wing enrolled in April, 1922 and completed the course in September, 1923. September 15, he wrote as follows:

"I want to thank you for the card case and Certificate of Proficiency which you sent me with my last report. My work in accounting has been very enjoyable as well as very valuable. I want to thank you for your instruction and courteous treatment under all conditions; also for having recommended me for membership in the National Association of Cost Accountants."

Mr. Wing is Principal of the Bookkeeping and Accounting Department of the Lincoln Business College, Lincoln, Nebraska.

We offer an intensive training in either accountancy or income tax procedure to teachers of commercial subjects and school officials who have a knowledge of the fundamental principles of bookkeeping and related business subjects. This is the best time of the year to begin a course of this kind.

By subscribing now you will be able to complete either course during the school year without it in any way interfering with your usual duties. Write for application form and booklet entitled "Instruction at Cost." Be sure to state whether you are interested in the study of Accounting or Income Tax Procedure.

C. P. A. DEPARTMENT

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The BALANCE SHEET

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"THE BALANCE SHEET" is published monthly by the South-Western Publishing Company, Cincinnati, Ohio. It is a magazine for commercial teachers and others who are interested in commercial education.

This magazine will be sent without charge, upon request, to commercial teachers and school officials who are interested in commercial education. We should be advised promptly of a change in address. If a reader fails to receive his copy of "The Balance Sheet" for any month, he should notify this office during that month, otherwise we may not be able to supply a duplicate copy.

We welcome for publication articles, addresses, problems, letters, exercises, questions for class discussion, announcements, convention programs, and items of interest to commercial teachers in general.

Back numbers of the following issues are still available and copies will be mailed upon request:

October	1919	October	1922
April	1920	November	1922
September	1920	December	1922
May	1921	January	1923
September	1921	February	1923
October	1921	March	1923
November	1921	April	1923
December	1921	May	1923
March	1922	September	1923
April-May	1922		

HEY! YOU COMMERCIAL TEACHERS!

Remember Our National Convention Last Year?

When: E. G. Miller came clean, we mean clear from Pittsburgh, and brought six dozen collars along with him from force of habit.

When: Ashby of Kentucky won that case of Tanlac; Gaylord of Massachusetts won that Brush and Comb Outfit; and Smith of Missouri that Gold Safety Razor.

When: Spillman forgot to tell us that story about "Go ask Father."

When: B. V. D. Porter, our Expired-President of last year, and "Gumbo" Slinker, sang that duet entitled, "The Catholics and the Jews are making broadcloth gowns for the K. K. K. down in the Negro church."

When: Jumpin' Agile White was re-elected Secretary of State without even a vote being cast. Wish there were more boys like him.

When: That boy from Missouri, Convention Talker Smith, President of Smith Brothers, Inc., of Kansas City, made that grave appeal for his home town, and nearly turned the trick. Better watch that young fellow this year.

When: You resolved Never to Miss a Convention when it is headed by such a man as Dynamic Wolverine McMillan, Chief Advisor for Henry Ford.

Well! Those days are gone forever, But, there'll be some more just like them in Chicago from December 26 to 29, 1923. We're looking for You.

NEXT MONTH

A discussion of "The General Objectives in Commercial Education" by I. R. Garbutt, Supervisor of Commercial Education, Public Schools, Cincinnati, Ohio.

MODERN COST ACCOUNTING

by

GEORGE E. BENNETT, A. B., LL. M.*

Industrial Accounting

This term is equivalent to cost accounting in its broadest sense denoting a subject much wider in scope than is ordinarily conveyed by the term "cost accounting", the latter, in general, being better titled "unit cost accounting."

Industrial accounting comprehends the entire system of accounting of an industrial enterprise by means of which the executives have a dependable guide in the administration of manufacturing operations. Through such a system variations between actual and standard performance are revealed to the executives which, in turn, point the way to economies and increased output.

Large scale production cannot be undertaken successfully without dependence upon industrial accounting. But in this connection, the general accounts reflected in the Statement of Profit and Loss are not involved. Such a statement has its purpose, but this should not be primarily the function of industrial accounting. The Statement of Profit and Loss provides the information upon which the manager may lay his plans to secure reductions in cost. The reports secured under a proper system of industrial accounting will disclose whether the output of the factory is measuring up to the standard planned, whether labor costs are being kept within reason to permit of a fair profit, whether materials are being utilized without excessive waste, and whether the overhead expenses of the producing and non-producing departments are being confined within the limits predetermined. Since these are the objects of industrial accounting, the term, if comparable at all to that of "cost accounting" must be much broader in meaning than that usually attached thereto.

Cost Accounting

Unit cost accounting is an important division of industrial accounting. To the writer, cost accounting and industrial accounting are looked upon broadly as one and the same, unless an individual is specific enough to state that he refers to unit cost accounting.

Cost accounting, therefore, may be defined briefly as that branch of accounting which furnishes an accurate record of production costs and the data upon which the management may judge the efficiency of present operations and plan future actions.

Efficient Organization

The efficiency of any factory, as a whole, depends entirely upon its organization and no factory organization is complete without an efficient and adequate system of cost accounting. Such a system is a problem of organization and management which, when solved, eliminates the element of guess-work or rule of thumb, so commonly resorted to. It gives the management accurate figures upon which to base selling prices. A well organized plant can manufacture better goods at the same cost, or the same goods at a lower cost, than is possible in a poorly organized plant.

Genesis of Costs

Probably the earliest reference made to the subject of factory costs in any form by a writer was when Charles Babbage, an Englishman, in 1832, in his work entitled Economy of Manufacture, said:

"The great competition introduced by machinery and the application of the principle of the sub-division of labor, render it continually necessary for each producer to be on the watch to discover improved methods by which the cost of each article can be reduced, and with this end in view, it is of great importance to know the precise expense of every process, as well as the wear and tear of machinery which is due to it."

In a subsequent chapter dealing with the "Causes and Consequences of Large Factories," he points out that in reference to any particular manufacture, there is a certain minimum proportion of indirect expenditure for supervision, lighting, clerical work, passage of materials from process to process, repairing, etc., which cannot be exceeded in any similar factory without a resultant less efficient production.

Notwithstanding that Babbage realized the importance of these matters so early in the development of the manufacturing industry, only since about 1905, when the principle of competition began to attain full growth, causing industrial existence to become a matter of life and death, have manufacturers, in general, come to a realization of the importance of scientific cost accounting. And at no time in the history of our country is the matter of industrial existence more serious than at present.

Important Uses of a Cost System

The advantages of a good cost system are many. To be specific, some of the more important uses may be indicated as follows:

1. Determination at any time of the value of material, goods in process, or manufactured products on hand.

2. Ascertainment of standard cost based upon normal operating conditions.

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3. Comparison of production cost with former similar orders or with a standard cost, to determine and analyze differences in cost.

4. Pre-determination of cost based on former or standard cost of the same or similar article or operation in order to fix selling prices.

5. Determination of variation in efficiency by departments or operations as to:
(a) Quantity output.
(b) Increase in labor cost.
(c) Increase in overhead expense.

6. Determination of causes of variation in efficiency and the cost involved under each cause.

7. Determination of loss or gain through variations in efficiency, divided as to shop responsibility and management responsibility.

8. Estimation of future financial requirements, based upon accurate records of past purchases and consumption of material, and expenditures for labor and factory expenses.

9. Determination of variances in material cost, separated as to variances due to economy or lack of economy in shop operation.

The selling department is in a position to push the sale of that portion of the factory product which can be produced most economically, and the management can note results from the monthly statements instead of waiting for the semi-annual or annual statements. No two factories, even those manufacturing the same kind of commodities, are exactly alike; therefore, costs are bound to differ between them. The equipment, the location, the nearness to the supply of raw material, the cost of fuel (which probably would depend on the distance from the coal fields), the water supply, the ability to procure the necessary help, etc., have a marked bearing on causing cost differences. An article which could be produced and sold at a profit in one factory, may be out of the question in another factory. Again, an article which could be made and sold at a profit in the second factory may not be manufactured in the first one except at a loss. A good cost system will enable the management to see these differences and push the article on which they make the most profit. In the case of staple articles, the selling prices of which are fixed in the open market, this information is invaluable. In a number of instances where modern and efficient systems of cost keeping have been installed in old-established factories, it has been found that some goods actually had been sold at a loss, while others had been priced so high as to cause a loss of business.

In a departmentalized establishment the advantage is that, if a foreman be shown the exact cost in detail of running his department, he probably will see ways of decreasing it without lessening its efficiency, which otherwise would have escaped him altogether.

Attitude of Employees Toward a Cost System

It is important for the successful installation of a cost system that the foremen should be inclined favorably toward it. Without their cooperation, and perhaps in the face of their active opposition, the installation might be well nigh impossible. A good cost system, properly operated, tends to prevent shirking, reduces dead time and increases efficiency; but in doing this, it will demand greater effort and more steady application on the part of the men. Also, it necessitates a closer supervision of both men and machinery than before, plus a general tightening up all round. Because of this, and because of a general apprehension that the new order of things in some way may work to their disadvantage, the men almost invariably will oppose the installation of an efficient cost system. On the other hand, if they can be shown its benefits, and can be induced to give it their cheerful support, to make their reports promptly and correctly, and to accept suggestions without ill feeling, a long step is taken toward its ultimate success.

Elements Entering into Factory Costs

The remainder of this article is devoted to a simple presentation of some of the principles underlying unit cost accounting. They must be accepted as illustrative only.

Three elements enter into factory cost—labor, material, and overhead expense or burden. The labor and material cost constitute what is termed "prime cost," its amount is readily obtained. But collecting and properly distributing the burden over the product is a difficult problem and requires a most careful study into all the factory conditions on the part of the cost accountant.

Burden

When one takes into consideration the fact that in many shops the burden exceeds the direct labor charge, it is seen readily that a correct distribution of this item is most important.

Such items as taxes, insurance, depreciation of machinery, repairs to buildings, power, heat, light, and the salaries of the superintendent, foremen and clerks, enter into the burden of the average factory. These items are taken up briefly in the order named in an attempt to show how each is usually handled, to the end that it may be distributed finally to that part of the product to which it belongs.

Taxes

This item may be distributed to the different departments according to the value of the land and buildings occupied by each. Book values are usually used as a basis. Income taxes, franchise taxes, and capital stock taxes are not manufacturing overhead charges, however, but are financial expenses.

Insurance

Fire insurance premiums should be divided according to the valuation of buildings, equipment and product insured in each department. Liability insurance premiums are diffusable to departments upon the basis of departmental payrolls. Group life insurance may be distributed to departments upon the basis of the number of workmen insured in each department.

Depreciation of Machinery

Depreciation of machinery is a delicate proposition to handle since it is more of an engineering than an accounting problem. No matter how much care is taken of a machine, gradually it is wearing to the end that sooner or later, if retained long enough, it must take its place on the scrap pile; therefore, some provision should be made for its replacement. Again, the chance of the machine becoming obsolete must be taken into consideration. Improvements are being made continually and the chances are that, before the machine is entirely worn out, something new will be placed on the market which will make it impossible to run the old machine at a profit. Because of this fact, it will find its way to the "graveyard."

In order to provide for the replacement of a machine, in the event of its becoming either worn out or obsolete, a certain amount of its cost must be added to the cost of the product manufactured each month. To illustrate: The engineering department decides that the life of a machine will be about ten years; the accountant then proceeds to add to the cost of the product passing through that machine enough so that, at the end of the ten years, there will have been accumulated an amount sufficient to replace the machine. This accumulation of machine cost absorbed by product is recorded in the account of Reserve for Depreciation. A machine, when purchased, is charged to a permanent investment account at full value.

Repairs to Machinery

Minor repairs or maintenance charges are considered always as part of the burden but when an extensive repair is made, if in the nature of a renewal, it should be considered as such and charged against the Reserve for Depreciation. It is often difficult to distinguish between a repair and a renewal since no fixed rule can be given. If the repair is of such a nature as to prolong the life of the machine beyond the time of its usefulness, as estimated by the engineering department, it should be considered a renewal. On the other hand, the renewal of a small inexpensive part should be charged to repairs. Some factories make the dividing line $5.00, others higher. That is, if such a renewal should cost less than $5.00, it is considered a repair; over this amount, a renewal. This is a matter, however, which must be decided upon in each individual case.

Depreciation of Buildings

Depreciation of buildings is a subject upon which volumes have been written and concerning which this article necessarily must be brief. No matter how substantially a building is constructed, it will slowly deteriorate and, in the course of time, must be replaced. For this purpose a Reserve for Depreciation is established, the same as in the case of the machinery, and the product charged accordingly, as time passes, with whatever amounts are accumulated under such reserve.

The rate of depreciation may vary from 2 to 10% per annum according to the type of building and the purpose for which it is used. A frame structure would require a much higher rate than one constructed of brick or stone. A building used for manufacturing purposes and containing heavy machinery, which would subject it to a continuous jar, should have a higher rate than one used for office or warehouse purposes.

Repairs to Buildings

The same care should be observed here in separating the maintenance charges from the renewals as in the case of machinery. Repairs to buildings is a maintenance charge which should become part of the burden to be absorbed by the product manufactured. But an extensive repair, such as a new roof, a new floor, or in fact any repair which adds to the life of the building should be considered a replacement, to come out of the Reserve for Depreciation.

Power

Power may be charged to the departments according to the amount used by each. In the case of steam power, this is rather difficult and is a problem for the engineering department rather than the accounting department. When electric power is used, the case is simplified, and the charge per department is readily obtainable, either upon the basis of horse-power consumed by the motors in the departments, or upon the basis of the Kilowatt-hour consumption where the current is metored. Within the departments further subdivision of this charge may be made, each machine being charged with the average amount it consumes.

Heat

Heat is divided among the departments according to the feet of radiation in each.

Light

Light is divided among the departments according to the amount of current consumed by each, measured by lamp wattage.

Salaries of Superintendent and Factory Clerks

The superintendent's salary and those of the factory office force may be distributed to the departments either according to the number of men working in each, the total

payroll of each, or according to the time actually spent in each department. The latter distributing requires the keeping of time records. The foremen's salaries and those of the department clerks are chargeable direct to the departments in which they are employed.

Rent

This burden item may be distributed to departments on the basis of usable square feet of space occupied. Sometimes the charge per square foot is uniform in all departments; again, the charge per square foot may vary in accord with the location of a particular department.

Collecting the Charges

For collecting the various charges of labor, material, and burden, four series of shop orders may be issued:

1. Departmental Orders. These are standing orders issued to the departments for the purpose of collecting and charging to the proper departments all items of burden accruing within the department, which cannot be allocated to any of the special orders.

2. Special Expense Orders. These are also standing orders the purpose of which is to collect and keep separate the cost of certain items of expense which cannot be charged directly to the departments, but which will form a part of the burden to be distributed among them. Such items as power, heat, light, fire protection, watching, etc., would be illustrative.

3. Special Shop Expense Orders. These are issued for every repair job where it is desirable to know the exact cost thereof before such cost becomes a part of the burden; and for all renewals, additions, and improvements, the cost of which becomes a part of the permanent investment.

4. Production Orders. These are issued for the manufacture of all the items included in the product of the factory.

Distributing Burden Over Product

Several methods exist for distributing burden over the product. Only three of them will be touched upon herein for purposes of illustration. Probably the oldest and, in fact, one which is still in general use, is the Percentage On Wages method. This consists of taking the total burden for a department and ascertaining what percentage it is of the money paid out for labor. The resultant percentage should be added to each job according to the amount of actual labor charged to it.

The Hourly Burden plan is used extensively and may be much more satisfactory than the Percentage On Wages method, in that it takes **time** instead of **wages** as a basis for distribution. In this method, the total burden of a department for, say, one month is divided by the number of hours worked during the month, the result being what is called an "hourly constant," this to be added to each job according to the time spent thereon in the department.

At first thought, one is apt to say that if an article is made at a piece price, the cost is the same whether the workman produces 50 pieces per day or 100 pieces per day; the Percentage On Wages method of distributing burden would seem to confirm this opinion.

To illustrate the difference between these two plans, take for example a small shop producing hand-made furniture. Suppose that the burden consisting of rent, heat, light, etc., amounts to $6.00 a day. Suppose there are two men employed in this shop, one is a skilled mechanic and a rapid workman receiving a wage of $4.00 a day, and the other a less skilled and slower workman receiving but $2.00 a day. The total wage each day is $6.00, and the total burden each day is $6.00. The burden, therefore, is 100% calculated upon the Percentage On Wages method, or $1.00 of burden for every $1.00 of actual labor. Assume the skillful man can make a table in one day. The labor cost will be $4.00, the burden $4.00, a total of $8.00. The slower, less skillful man is making the same kind of a table, and it takes him two days to complete the job. The labor cost will be $4.00, the burden $4.00, a total of $8.00, the same as in the case of the more efficient workman. Apparently, the Percentage On Wages method places the less efficient workman on a parity with the more efficient one, so far as costs are concerned.

Next, assume the same figures and make the distribution using time as a basis. As a matter of fact, the cheap man takes up as much room in the shop as the more efficient workman, and probably requires more supervision; therefore, one may assume without fear that it will take $3.00 a day to keep a man at work in this shop. Now take the same tables as before. The $4.00 man completes a table in one day; actual labor $4.00, burden $3.00, total $7.00. The $2.00 man makes the same kind of a table in two days; actual labor $4.00, burden $6.00, total $10.00. The cost is $3.00 more than when the table is made by the more efficient workman. By this simple illustration, it would seem that time is a much more equitable basis for the distribution of burden than wages.

The Hourly Burden plan, while a decided improvement over the Percentage On Wages method, is still far from being perfect. The main fault with it is that it does not set out or recognize the true conditions that exist in a factory relative to idle or dead time. The latter should be considered as an important separate factor of costs.

Machine Rate Method

For this method, each department is subdivided further into what are known as production centers. Each machine or workbench, at which a workman is employed, is a "production center." To each center are charged all expenses which, upon an-

alysis, can be allocated thereto. Insurance, taxes, and depreciation of buildings are charged according to the percentage of valuation within the center. Depreciation of machinery is charged at a rate based upon the estimated life of the machine in the center. Power is charged to each center according to the average amount used; and heat and light are reduced to a floor area basis to be charged to each center according to floor space occupied. These charges are reduced to an hourly charge, which may be termed a "rental charge."

Each job passing through a production center is charged with this rental according to the number of hours worked on it. When a machine is idle, the rental charge goes on just the same, and is charged into what is known as a "supplementary rate" which later will be charged to the different jobs according to the time spent on each, or on a percentage basis. Besides the idle time, there will be included, also, in this rate the items of superintendent's salary, foremen's salaries, and any general items which cannot be allocated to the specific different centers. The ratio of the supplementary rate to the amount distributed by the machine rate, forms a barometer whose fluctuation is an index of the efficiency of the shop. When all the machines are running full time, the supplementary rate is made up of the general charges only; in proportion, as all the machines are not kept full of work all the time, the ratio of the supplementary rate to the amount distributed by the machine rates rises.

As an example of this method, take the illustration given by Mr. Church,* one of the earliest advocates thereof. He assumes a shop with four machines, on which the machine rate was based on the assumption that they would each work 200 hours, the rate being charged to each machine as 40, 30, 20, and 10 cents, respectively. The total shop charges for one month are assumed to be $200.00.

Machine	Working Hours per Month	Rate per Hour on New Plan	Monthly Earnings on New Plan
A	200	40 cts	$80.00
B	200	30 cts	60.00
C	200	20 cts	40.00
D	200	10 cts	20.00

On the basis of the Hourly Burden plan, there would be $200.00 divided by 800, or $0.25 as the Hourly Constant. The total distributed by the Hourly Burden plan would be 800 hours at $0.25, or $200.00; the total distributed by the Machine Rates would be $80.00+$60.00+$40.00+$20.00, or $200.00.

On the Hourly Burden plan, this gives an average hourly rate of $0.25 for all jobs on whichever machine they happened to have been fabricated. On the application of the Machine Rate Method, there has been a separation of the charges instead of a mere lumping together to the end that the rate for each machine is different: A, $0.40; B, $0.30; C, $0.20; D, $0.10. Naturally, the cumulation of shop charges against any one order under each method will be radically different. For example, a certain job occupies 5 hours of the time of machine D and 1 hour of the time of machine A. Under the Hourly Burden plan, 6 hours at $0.25 equals $1.50; whereas, under the new plan, the charge would be 5 hours on D at $0.10, equals $0.50, and 1 hour on A at $0.40 equals $0.40, or a total of $0.90. The difference in the two totals is seen to be $0.60.

Suppose now the Percentage On Wages method is considered. Assume the wages of operators on A and B machines to be $0.20 an hour, and of those on C and D machines to be $0.15 an hour. Reckoning, as before, on the basis of 200 hours a month for each machine, the following results: Total wages for one month $140.00. As the shop charges are $200.00, this gives an average of 142.9% on wages for all work done by whichever operator or machine concerned. Hence, the charges incident to the job under discussion would be:

1. 5 hours of operator on D at $0.15 equals $0.75; on this, charges at 142.9% would be $1.07.

2. 1 hour of operator on A at $.20, equals $0.20; on this, charges at 142.9% would be $0.28.

3. Total charges for the job equal $1.07 plus $0.28, or $1.35.

This job has now been worked out under the three methods considered and the results may be summarized as under:

1. On Hourly Burden plan..... $1.50
2. On Machine Rate plan..... .90
3. On Percentage On Wages method. 1.35

The interesting question is, under a given case, which method is the most correct?

The above discussion has been based upon the case of a shop in which all machines are working full time. It is evident that under the Machine Rate Plan the standing charges, comprising such items as depreciation on particular machines, the proportion of taxes, insurance, heating, etc., which may be considered as reduced to a certain uniform charge for each square foot of floor space, and thus be debited according to the working space occupied by any machine, and all charges allied to these, can be assigned as properly to particular production centers as can rents in large buildings in which subdivided areas are let out to tenants.

These charges are in the nature of rent, for it might happen easily that in a certain building a number of separate little shops will be established each containing one machine, all making some particular part or working on some particular operation relative to the same class of goods. Each shop, however, will be occupied by an independent mechanic, not a wage earner, who rented his

*Distribution of Expense Burden, pages 58–75.

space, power and machinery, and sold the finished product to the lessor. In this particular case, what would be the shop charges of these mechanics? Clearly, they would comprise as their chief, if not their only item, just the rent paid, plus a separate charge for power according to the quantity consumed.

In each little shop, whether idle or busy, the rent is going on all the time. Only the charge for power might be stopped while the shop is shut down. If the mechanic in one of these shops is working only half of his time, it is clear he must double his rate of distribution on such work as he does, if he is to distribute his month's rent over his month's work. But instead of doubling his rate, he might continue to charge at a normal rate, and then at the end of the month find out how much he was yet in arrears which amount he will distribute as a supplementary rate. In this way, he benefits in two ways:

1. His normal rate being constant, he can compare the costs of jobs worked on at different periods.

2. The amount of the supplementary rate (its ratio to the normal rate) will serve as an accurate barometer of the conditions under which he has been working during any period.

If the normal rate is so fixed, for instance, that when fully employed the supplementary rate was zero percent. of the normal, and then he observes that it is steadily rising, 5%, 10%, 15%, etc., he may be fairly certain that things are not going well with him. Of course, in the case of a little shop, this would be perfectly clear to him without the aid of the rates to tell him so; but if the partitions are all taken down and the hundred separate little shops made into one large general shop, this information may be very important indeed to those in authority.

In the case mentioned above where the shop charges amount to $200.00, assume the following:

Machine	Hours Worked	Rate	Amount
A	120	$0.40	$48.00
B	134	.30	40.20
C	169	.20	33.80
D	200	.10	20.00

The above tabulation shows 623 hours worked, and $142.00 of burden distributed. $200.00 minus $142.00 equals $58.00 undistributed, which must be taken care of by a supplementary rate. This may be handled in either one of two possible ways:

1. As an hourly burden of 9⅓ cents per hour, or

2. As a per cent. of 40.9 to be added to each job.

By the rise or fall of this rate, the efficiency of a shop may easily be seen and be compared one period with another. It is readily comprehended why this method is considered superior to all others, as a general proposition.

Cost Reports

These are compiled to make possible an intelligent analysis and comparison of costs, primarily to secure economies. Since prime cost factors are more readily determinable than those related to burden, control of material and labor is secured more readily than a control of burden items. Nevertheless, burden reports should be secured in so far as possible.

Cost reports should be prepared monthly. In general, such reports subdivide into classes as under:

1. Those for the factory manager:
   (a) Cost of Production (results of operations present period with past).
   (b) Record of Production (units produced departmentally present period with past).
   (c) Unfilled Orders (orders ahead present period with past).
   (d) Repairs to Equipment, (e) Spoiled Work, (f) Defective Work — To determine reasonableness of amount.
   (g) Analysis of Burden (departmental expense present period with past).
   (h) Undistributed Burden (departmental over or under distribution present period with past).

2. Those for departmental heads. These reports are similar to those furnished the factory manager, except each set relates to one particular department rather than to the entire factory.
   (a) Purchasing department. These relate to materials on hand available for production, obsolete material, rejected material, variations in seasonal demand, etc.
   (b) Employment department. These relate to factory personnel primarily, covering turnover of labor, and cost of such turnover; also, cost of departmental operation.
   (c) Sales department. These relate to many things, among which the report of most importance concerned with production relates to a comparison of costs with estimates of sales prices.

3. Those for the general manager:
   (a) Comparative Balance Sheet.
   (b) Comparative Statement of Profit and Loss.
   (c) Summaries of reports prepared for department heads plus copies of each detailed report therefor.

Needless to say, executives are more interested in cost reports than in anything else inasmuch as these present, in tangible form, the results of the cost system. The number of reports required and the particular reports necessary cannot be governed by any general rule inasmuch as each industry has different problems with which to contend. Nonessential matters never should be covered by reports inasmuch as busy executives have no time for matters of no consequence.

Cost Control

Most persons with a fair knowledge of accounting principles have a hazy idea of cost control—the control of cost records upon the General Ledger. This indefiniteness is accentuated where one set of facts calls for all entries to be made upon the General Ledger, and another for a partial spread upon a Factory Ledger interlocked with the General Ledger.

Although the cost accounts should be controlled by the General Ledger, such practice is anything but uniform. Since many cost systems are incomplete, being used to determine a cost for a particular line within an establishment, circumstances may occur under which a test system is presumed as being entirely adequate therefor. Nevertheless, present practice leans specifically toward control, a control by means of which the cost accounts are interlocked with the regular financial books.

In order to comprehend this principle of control, one should bear in mind the following two-way possibility:

1. The cost accounts may be carried upon the General Ledger. Hereunder, the entry principle followed corresponds closely to that followed where departmental accounts are operated. In fact, under this condition, the cost department is considered as a department.

2. The cost accounts may be carried upon a separate ledger, as the Factory Ledger. If so, the factory is treated as a branch and the entries made follow the branch principle. A controlling account with the main office appears upon the Factory Ledger, and a controlling account with the factory appears upon the General Ledger; the two controls articulate one with the other.

The first method usually is understood by all having a knowledge of cost principles. The second is not comprehended so universally.

In order to illustrate the second method mentioned, the following simple proposition and solution is offered:

Proposition A

A manufacturing corporation operating a system of cost accounts, through a Factory Ledger controlled by the General Ledger, presents the following data, relating to production as at January 1, 1922. Raw materials in storeroom, $31,242.84; factory payroll applied and distributed but not paid, 4 days, $1,663.56; goods in process at prime cost, $127,776.88; in addition, factory overhead, $16,074.34; management expenses, $24,149.84; finished product in stock, $43,312.02.

The financial operations during the year related to the factory comprehend purchases of raw material, $160,832.90; factory payrolls, $251,587.80; factory expenses, including wages not applied to cost accounts, $49,692.00; management expenses, $76,200.00.

The manufacturing operations during the the year comprehend raw materials issued on requisitions, for consumption, $159,640.68; wages applied and distributed to cost of manufacturing, $240,500.80, and to factory expenses, $11,918.78, including the sum stated in the preceding paragraph.

Finished goods transferred from the factory to the main office warerooms at prime cost, materials, $157,085.16; labor, $236,667.50.

At the close of the year the goods in process included, in addition to prime cost, factory expenses, $16,878.04; management expenses, $25,353.32; and factory payroll for four days amounting to $2,495.34, applied and distributed, but not due.

The percentage of overhead to be charged to finished goods is to be the same as that of the previous year.

Prepare journal entries and accounts for the Factory Ledger.

Solution

MANUFACTURING CORPORATION

Trial Balance — Factory Ledger

January 1, 1922

Raw Material	$ 31,242.84	
Payrolls		$ 1,663.56
Goods in Process	127,776.88	
Factory Overhead	16,074.34	
Management Expense	24,149.84	
Finished Goods	43,312.02	
General Ledger Control		240,892.36
	$242,555.92	$242,555.92

Journal

1

Raw Material	$160,832.90	
General Ledger		$160,832.90
Purchases During Year		

(*Continued on next page*)

2			
Payrolls		251,587.50	
General Ledger			251,587.50
Payrolls for Year			
3			
Factory Overhead		49,692.00	
Payrolls			11,918.78
General Ledger			37,773.22
Total for Year			
4			
Management Expenses		76,200.00	
General Ledger			76,200.00
Total for Year			
5			
Goods in Process		159,640.68	
Raw Materials			159,640.68
Requisitions Issued			
6			
Goods in Process		240,500.80	
Payrolls			240,500.80
Wages Applied and Distributed			
NOTE. Before proceeding further, an arithmetical calculation is in order:			
Prime Cost of Goods in Process, January 1			$127,776.88
Overhead on above:			
Factory Overhead		$16,074.34	
Management Overhead		24,149.84	40,224.18
Per cent. of Overhead on Prime Cost			31.48%
Overhead on Product Finished During Year:			
Factory Overhead		$48,888.30	
Management Overhead		74,996.52	123,884.82
Prime Cost Necessary for above amount of Overhead			$393,535.00
Prime Cost of Goods in Process, December 31			$134,383.36
Overhead on Above at 31.48%			$42,303.88
Overhead Actually Applied:			
Factory Overhead		$16,878.04	
Management Overhead		25,353.32	42,231.36
Balance, Overhead Unabsorbed, to Surplus			$ 72.52
7			
Finished Goods		$393,535.00	
Goods in Process			$393,535.00
Transfer to Finished Goods			
8			
Finished Goods		48,888.30	
Factory Overhead			48,888.30
Transfer to Finished Goods			
9			
Finished Goods		74,996.52	
Management Expense			74,996.52
Transfer to Finished Goods			
10			
General Ledger		517,706.00	
Finished Goods			517,706.00
Prime Cost:			
Labor	$157,085.16		
Material	236,667.50		
	$393,752.66		
Overhead—31.48%	123,953.34		
	$517,706.00		

Factory Ledger

RAW MATERIAL

1922			1922		
Jan. 1	Balance	$ 31,242.84	Dec. 31	Goods in Process (5)	$159,640.68
Dec. 31	General Ledger (1)	160,832.90		Balance	32,435.06
		$192,075.74			$192,075.74
	Balance	$ 32,435.06			

PAYROLLS

1922			1922		
Dec. 31	General Ledger (2)	$251,587.50	Jan. 1	Balance	$ 1,663.56
	Balance	2,495.64	Dec. 31	Factory Overhead (3)	11,918.78
				Goods in Process (6)	240,500.80
		$254,083.14			$254,083.14
				Balance	$ 2,495.64

GOODS IN PROCESS (Prime Cost)

1922			1922		
Jan. 1	Balance	$127,776.88	Dec. 31	Finished Goods (7)	$393,535.00
Dec. 31	Raw Material (5)	159,640.68		Balance	134,383.36
	Payrolls (6)	240,500.80			
		$527,918.36			$527,918.36
	Balance	$134,383.36			

FACTORY OVERHEAD

1922			1922		
Jan. 1	Balance	$ 16,074.34	Dec. 31	Finished Goods (8)	$ 48,888.30
Dec. 31	Sundries (3)	49,692.00		Balance	16,878.04
		$ 65,766.34			$ 65,766.34
	Balance	$ 16,878.04			

MANAGEMENT EXPENSE

1922			1922		
Jan. 1	Balance	$ 24,149.84	Dec. 31	Finished Goods (9)	$ 74,996.52
Dec. 31	General Ledger (4)	76,200.00		Balance	25,353.32
		$100,349.84			$100,349.84
	Balance	$ 25,353.32			

FINISHED GOODS

1922			1922		
Jan. 1	Balance	$ 43,312.02	Dec. 31	General Ledger (10)	$517,706.00
Dec. 31	Goods in Process (7)	393,535.00		Balance	43,025.84
	Factory Overhead (8)	48,888.30			
	Management Exp. (9)	74,996.52			
		$560,731.84			$560,731.84
	Balance	$ 43,025.84			

(*Concluded on page 25*)

A DISCUSSION OF THE TRANSCRIPT PROBLEM

by

ELIZABETH A. JEVON

The problem of transcribing from shorthand writing into typewriting is of constant concern to all conscientious teachers of secretarial courses. This paper is written not as the last word on the subject, but to provoke a healthy discussion that will result in the gathering together of all the best ways of bringing about the best results from the viewpoint of the pupil, the teacher, and the employer.

In making the study, five questions present themselves:

A. Is the subject of transcription attacked in the first stages in such a manner that spelling, punctuation, making sense, and transcribing into typewriting what has been written in shorthand become almost automatic?

B. Is the time allowed for practice in transcribing (rarely more than one semester in the high school) sufficient to give the pupil confidence in his ability to do accurate transcribing?

C. Is the time element for each individual transcribing taken sufficiently into consideration to prevent copying from neighboring pupils, and to prevent the forming of dawdling, careless, and wasteful habits?

D. Are the transcripts checked and graded in an intelligent and intelligible manner?

E. Are discussions of errors so simple, reasonable, and exact that the repetition of the error discussed is less likely to occur?

Mrs. Jevon received her special training in commerce at Martin's School of Pittsburgh and the New Castle Business College, supplemented by work at State College and at the University of Pittsburgh. For the past seven years she has been a teacher in the Schenley High School of Pittsburgh. Previous to that time she taught for five years in the Wilkinsburg, Pennsylvania, High School. Mrs. Jevon has an enviable reputation as a teacher of shorthand and typewriting, having specialized in these subjects for many years.

This article is based upon an address delivered by Mrs. Jevon before a sectional meeting of the Pennsylvania State Teachers' Association at Pittsburgh, Pennsylvania.

Considering Question A: The following plans seem to be the ones most commonly in use in the first stages of transcribing:

1. First transcriptions are made from dictated new matter of a general character; no time is allowed for preliminary reading; no time limit is allowed for transcribing; no limit to the number of trials.

2. First transcriptions made from dictated new matter of a general character; limited time for silent reading; unlimited time for transcribing; unlimited number of transcript trials.

3. First transcriptions made from dictated new matter of a general character; limited time allowed for silent reading; no time limit for transcribing; unlimited number of transcript trials.

4. First transcriptions made from studied shorthand plates; no time allowed for silent reading; limited time for transcribing; unlimited number of transcript trials.

5. First transcriptions made from prepared and studied notes of the pupil's own transcribing from assigned printed matter into shorthand; limited time of 50 words a minute for silent reading; limited time of 10 words a minute allowed for transcribing; first trial copies only accepted.

Conclusions

Plan 1 seems weak in every point for the following reasons:

a. Transcribing from new matter puts an undue strain upon the pupil's powers of co-ordination.

b. Lack of preliminary reading compels each shorthand outline to be the unit instead of the letter.

c. Unlimited time for transcribing is of benefit to none but the weakest group in the class.

d. Unlimited number of trials results in an immense waste of time, effort, and materials.

Plan 2 is stronger than Plan 1:

a. The time allowed for silent reading gives the pupil opportunity to get the sense of the dictation before he begins to write.

b. Silent reading enables the pupil to make notations of punctuation, paragraphing, etc., which insures sense in the transcript.

c. Silent reading makes the letter the unit instead of the shorthand outline.

In other points, Plan 2 shows the weaknesses of Plan 1.

Plan 3 is stronger than Plan 2:

a. Limited time for transcribing results in the pupil's putting forth his best efforts on his first trials.

b. Limited time for transcribing prevents waste in time, effort, and materials.

c. Limited time for transcribing gives the high-grade pupil opportunity to proceed to other assignments without undue loss of time.

Plan 4 is stronger than Plan 3:

a. The pupil is relieved through the studied shorthand plates of the undue strain placed upon his power of coordination.

The weaknesses of Plan 4 appear to be as follows:

a. The pupil is placed under false conditions of transcribing from perfect shorthand outlines not of his own writing.

b. The weakness of unlimited number of transcript trials is also shown in Plan 4.

Plan 5 seems the strongest of the group:

a. There is no undue strain on the pupil's power of coordination because the shorthand has been studied in advance.

b. Transcribing from his own notes places the pupil immediately under office conditions.

c. Being allowed to read his notes before making his transcript, puts the pupil under office conditions.

d. Ten words a minute gives the slowest pupil sufficient time to complete the transcription on time.

e. Limitation to first trials discourages wasteful, dawdling, and careless habits.

The possible weaknesses of Plan 5 are:

a. A regrettable loss of time after the transcript has been finished if provision is not made for the use of the time saved.

b. Limitation to first trials is open to question.

Considering Question B: One semester seems all too short for satisfactory results in teaching transcribing unless one full period each day can be given to the study.

Considering Question C: The following points merit careful study:

a. Does unlimited time for transcription induce dawdling, dishonesty, and indecision on the part of the pupil?

b. Does an unlimited number of trials in making transcripts conduce to dishonesty, carelessness, and wastefulness in time, energy, and materials?

Considering Question D: The various methods of checking and grading transcripts, given in later studies, merit careful study, comparison, and weighing.

Considering Question E: The wide variation from no discussion of errors found on transcripts to lengthy discussions of seemingly no value, needs intelligent treatment on the following points:

a. The attention of the entire class during the discussion must be absolute.

b. Rulings on new errors should be given quickly, decidedly, and simply by the teacher.

c. Rulings on old errors should be given quickly, exactly, and decidedly by a pupil.

For the sake of looking at the transcript problem from different viewpoints, studies of the four chief ways of checking and grading have been made as follows:

Study A is of the plan used by a school that stands high in the training of teachers, the name of which we are not at liberty to use.

Study B is of the plan advocated by the Eastern Idaho Teachers' Association to be used in the contests that are to be conducted in the state of Idaho. The data is taken from a recent number of the American Shorthand Teacher.

Study C is of the plan used by the Gregg School of Chicago according to information given by one of their teachers at the National Educational Association at Chicago last December. A report of this discussion was given in The American Shorthand Teacher.

Study D is of the plan used by Schenley High School of Pittsburgh, Pa.

Study A—Plan used by a teachers' training school:

Point 1: Dictation material ranges from one-syllable words of a non-technical nature in the beginning stages of transcribing to highly technical matter at the close.

Point 2: The Pupil's power of coordination is strengthened by degrees in the following manner:

a. Typing only is considered at first.

b. Typing plus punctuation is considered next.

c. Typing, punctuation, plus spelling comes third.

d. Typing, punctuation, spelling, plus reading, which is making sense, comes last.

Point 3: After the pupil has become adjusted to the new conditions of producing typewritten copy from shorthand writing instead of printing, his papers receive grades in:

a. Typewriting, by a typewriting teacher when possible.

b. English, by an English teacher when possible.

c. Shorthand, by the shorthand teacher.

Point 4: Whether the grades in the different phases of transcribing are given by separate teachers or by the shorthand teacher only, the transcript grade is a composite of the three grades.

Questions for Study and Criticism

1. Does not the plan of the training school seem to be indefinite and grouping in relation to getting transcribing results?

2. Is not the transcript and not each phase of transcribing, the unit?

3. Why should the pupil not be expected to function in all three ways from the beginning?

4. Are typewriting and spelling from shorthand outlines true measurements of the pupil's ability to typewrite and spell?

5. Could the grades given by the typewriting and English teachers be justly used as grades in typewriting and English?

6. Are not the words written from the shorthand outlines the only true measure in this testing method?

The plan of the training school seems to have little to recommend it. It appears to have no advantages over the plan used by the Idaho teachers, the discussion of which follows:

Study B—Plan advocated by the Eastern Idaho Teachers' Association:

Point 1: The Idaho teachers recommend that three shorthand dictations of five minutes' duration be given as follows:

1. 400 words at 80 words a minute to grade 80% for the perfect transcription.

2. 450 words at 90 words a minute to grade 90% for the perfect transcription.

3. 500 words at 100 words a minute to grade 100% for the perfect transcription.

Point 2: 75% is the passing grade for any one of the three tests:

a. As the perfect transcript for the 80-word take is worth but 80%, only 5% of errors can be made before point of failure is reached.

b. As the perfect transcript for the 90-word take is worth 90%, 15% of errors can be made before point of failure is reached.

c. As the perfect Transcript for the 100-word take is worth 100%, 25% of errors can be made before point of failure is reached.

Point 3: One hour is allowed for the transcription of any one of the three tests:

a. The 80-word take will be read and transcribed at the rate of 6.6 words gross a minute.

b. The 90-word take will be read and transcribed at the rate of 7.5 words gross a minute.

c. The 100-word take will be read and transcribed at the rate of 8.3 words gross a minute.

Point 4: Penalties for errors in transcribing are as follows:

Periods or question marks	1%	each
Strikeovers	¼%	"
Wrong or omitted words	2%	"
Misspelled words	1%	"
Type errors	½%	"

Or a total of 4¾ per cent if one of each kind of error be made in the transcription.

The following tabulation shows the allowance of errors of each kind that may be made on a transcription, and the proportion of errors to the number of words transcribed:

80-word, 5 periods or question marks, or 1 in every 80 words..... 5%
90-word, 15 periods or question marks, or 1 in every 30 words.....15%
100-word, 25 periods or question marks, or 1 in every 20 words.....25%

80-word, 20 strikeovers, or 1 in every 20 words..... 5%
90-word, 60 strikeovers, or 1 in every 7 words.....15%
100-word, 100 strikeovers, or 1 in every 5 words.....25%

80-word, 2 wrong or omitted words or 1 in every 200 words..... 4%
90-word, 7 wrong or omitted words, or 1 in every 64 words.....14%
100-word, 12 wrong or omitted words, or 1 in every 41 words.....24%

80-word, 5 misspelled words, or 1 in every 80 words..... 5%
90-word, 15 misspelled words, or 1 in every 30 words.....15%
100-word, 25 misspelled words, or 1 in every 20 words.....25%

80-word, 10 type errors, or 1 in every 40 words..... 5%
90-word, 30 type errors, or 1 in every 15 words.....15%
100-word, 50 type errors, or 1 in every 10 words.....25%

Summing up the number of errors, their relation to the number of words transcribed, and their values, we get the following:

As the sum of the values of the different penalties is 4¾ per cent, it follows:

1. That the 80-word dictation can have one of each kind of error and an extra strikeover, or one error to each 67 words and the value of the errors is 5%, the limit.

2. That the 90-word dictation can have three errors of each kind, an extra type error and strikeover, or one error to each 27 words, and the value of the errors is 15%, the limit.

3. That the 100-word dictation can have five errors of each kind, and an extra misspelled word and type error, or one error to each 19 words, and the value of the errors is 25%, the limit.

Questions for Study and Criticism

1. Is not the premium put upon the fast take of shorthand as shown by the excessive number of errors allowed the 90- and 100-word dictations over the 80-word dictation, out of all proportion in valuing the transcription?

2. Is there not a regrettable lack of appreciation for accuracy in the transcription shown in this system of valuing?

3. Why should the speedy shorthand writer be expected to transcribe faster than the 80-word writer as is evidenced by the rate of speed required in transcribing?

4. Are not the sponsors of the plan mistaking the ability to write 100 words a minute in shorthand for ability to function as a capable transcriber?

Point 5: To be even relatively fair, the 90-word writer, as he transcribes but 50 words more than the 80-word writer, should be allowed but 450/400 of 5%, or 5⅝ per cent of errors in his 450 words; and the 100-word writer should be allowed 500/400 of 5%, or 6¼ per cent of errors in his 500 words.

Point 6: The 80-word writer has already been penalized to the extent of 20% in the value of the transcript, and it seems manifestly unfair that he be made to suffer a second time for the same deficiency of speed in taking shorthand.

Point 7: If the 450/400 and 500/400 plan of valuing were followed, the penalties and relation of errors to the number of words transcribed, would be as follows:

Kind of error considered	**80-word take**
Period or question mark	5, or 1 to 80
Strikeovers	20, or 1 to 20
Wrong or omitted words	2, or 1 to 200
Misspelled words	5, or 1 to 80
Type errors	10, or 1 to 40
Kind of error considered	**90-word take**
Period or question mark	6, or 1 to 75
Strikeovers	23, or 1 to 20
Wrong or omitted words	3, or 1 to 150

Misspelled words	6, or 1 to 75
Type errors	12, or 1 to 37

Kind of error considered	100-word take
Period or question mark	7, or 1 to 71
Strikeovers	25, or 1 to 20
Wrong or omitted words	4, or 1 to 125
Misspelled words	7, or 1 to 71
Type errors	13, or 1 to 37

Point 8: The minimum passing grades would then be as follows:

75% for the 80-word dictation
84% for the 90-word dictation
93% for the 100-word dictation

The weaknesses of the Idaho plan appear to be as follows:

a. In the values placed on the different types of errors.

b. In the emphasis placed on the speed of the shorthand.

c. In the lack of appreciation for accuracy in the transcript.

Its strength lies in the fact that it has a perfectly workable basis. In this it is very much like the plan followed by the Gregg School of Chicago, a study of which follows:

Study C—The plan used by Gregg School, Chicago, Illinois:

Point 1: The Gregg teachers give three shorthand dictations for tests in transcription for the different grades of diplomas. To acquire a Stenographer's Diploma, the pupil must pass on the lowest of these three takes, which consists of 500 words of solid matter dictated at 100 words a minute, to be transcribed in 45 minutes; and three letters, averaging 200 words each, dictated at 100 words a minute, to be transcribed in 55 minutes.

Point 2: 95% is the passing grade. It is arrived at by subtracting the number of points penalty from the number of words dictated, and dividing the result by the total number of words in the dictation.

Point 3: Errors are penalized according to their values in points, as follows:

Misspelled words	3 points each
Omitted, transposed, or misused words	1 point each
Improperly divided words	¼ point each
Type errors	1 point each
Punctuation	¼ point each

Or a total of 5½ points if one of each kind of error be made on the transcription.

Point 4: If the number of points penalty is to be deducted from the number of words transcribed, then each point penalty is equal to one word in value. If 95% is the passing grade, then the percentage of words deducted for errors will be 5%.
Since more than five per cent of errors fails the paper, it follows:

a. That five per cent of 500, or 25, gives the number of words penalty on the solid matter before point of failure is reached.

b. That five per cent of 600, or 30, gives the number of words penalty on the letter dictation before point of failure is reached.

Point 5: Relation of errors to number of words transcribed:

Kind of error considered	Solid Matter
Misspelled words	8, or 1 in 63
Omitted, transposed, or misused words	25, or 1 in 20
Improperly divided words	100, or 1 in 5
Type errors	25, or 1 in 20
Punctuation	100, or 1 in 5

Kind of error considered	Letter take
Misspelled words	10, or 1 in 60
Omitted, transposed, or misused words	30, or 1 in 20
Improperly divided words	120, or 1 in 5
Type errors	30, or 1 in 20
Punctuation	120, or 1 in 5

Summing up the number of errors and their relation to the number of words transcribed, we find:
As the sum of the values of the different penalties is 5½ points:

1. That four of each kind of error and three points to go on can be made on the solid matter before point of failure is reached.

2. That the three points to go on may consist of one spelling error, or three word or type errors, or 12 divisions of words or punctuation errors.

3. That the number of errors on the solid matter ranges from eight misspelled words to 100 errors in punctuation or misdivided words.

4. That the relation of errors to the number of words dictated ranges from one in every 63 words on misspelled words to one in every five words on punctuation and misdivided words.

5. That five of each kind of error with two and one-half points to go on can be made on the letter material before the point of failure is reached.

6. That the two and one-half extra points to go on may consist of two word or type errors and two misdivisions, or of 10 punctuations, or of 10 misdivided words.

7. That the number of errors on letters ranges from 10 misspelled words to 120 errors in punctuation or misdivided words.

8. That the relation of errors to the number of words dictated on letters ranges from one in every 60 words on misspelled words to one in every five words on punctuation or misdivided words.

The weakness of the Gregg plan appears to lie in the arbitrary values placed on the different types of errors.

The strength of the Gregg plan lies in the perfectly workable basis of the system of marking.

(*To be concluded in November issue*)

POPULARIZING THE PRIVATE BUSINESS COLLEGE WITH THE SCHOOL-GOING PUBLIC

by

A. L. WALTERS*

WHEN discussing any question, no matter of what nature, it is always advisable to make sure of the terms. I therefore begin by asking—What is the "school-going" public? and how may this be analyzed? For the purpose of our discussion, it may be well to divide the "school-going" public into two distinct classes. One of them may be said to consist of all those who have to do with school administration, such as members of boards of education, superintendents, principals, supervisors, and teachers. The other class may be said to comprise the pupils of the schools, no matter whether they are in the kindergarten, in the grades, in high school, or even in college.

Now if we assume that our profession needs popularizing, we thereby, directly or indirectly, admit its unpopularity. But, what has brought about this unpopularity, and what should be done to remove it?

Fortunately, there is more than one way to raise our profession in the esteem of the school-going public. The methods to be pursued may be divided into three classifications:

1. Those that pertain to the personnel who devote their time to administration and teaching;
2. Those that pertain to pupils in school; and
3. Those that apply to both these groups.

One of the chief reasons why most public school men look with disfavor on the private business college is the fact that quite a number of commercial schools today, in the light of Twentieth Century methods and standards, continue to seek to increase their enrollment from the ranks of the eighth grade graduates and in many instances from grades below. It is those of our institutions that offer mediocre courses and appeal to the common school graduate or to the public school failure, that have brought us into disrepute. As long as institutions are operated on a level with our common schools, it will be impossible to popularize the private business college with the school-going public.

What, then, should be done? I say, let us lift our standards to those of a college and appeal to the high school graduate. Fortunately, there are some high-grade schools that for some time past have pursued the last named policy, and it is to such schools that the public school men are extending the glad hand of cooperation.

What we should do is to encourage in every possible way the prospective student to complete his high school training before entering our schools. Before preparing this discussion, I wrote to several hundred public and private school men for their views on the subject, and it is on their answers that I base my contentions. One of the gentlemen addressed by me said that he circularized the graduates of the common school for the purpose of encouraging them to seek a high school preparation before thinking of going to a business school. This may not be practical in all places, but in most localities it undoubtedly is. Other schools have conducted "Go to High School" campaigns with great success. I wish I could take time to read to you some of the letters received from school officials in every state in the Union. I am sure the contents would surprise you. At any rate, you would know what the average public school man thinks of the average private business school.

A method that we have found very effective is to conduct speaking campaigns in the high schools, during which we urge high school students to complete their high school course. This method will win for you the respect and support of the school officials, and the good will and confidence of the pupils, and without directly referring to your own institution there will be an indirect appeal, which force is too strong to measure, in the popularizing of our profession with the school-going public.

Now, whenever a campaign of this nature is carried on, especially if the school pupils are to be written to, always see to it that your letters get into the hands of the school officials. We carry every high school principal, every high school teacher and every member of the board of education on our mailing list, so that they may see for themselves what kind of literature we send their students. Moreover, whenever we receive inquiries from undergraduates, we urge them to go through high school first. A carbon copy of each such answer is sent to the high school principal, a prodecure which has secured for us a vast amount of good will, not only from the officials, but from the students as well.

High School pupils ask advice of their teachers and for that reason the good-will of every high school teacher is worth much to us. It is not amiss to call personally on as many high school teachers as practical, to make friends with them and to acquaint them with your methods, standards and policies.

*Business Manager, Littleford School, Cincinnati, Ohio. From an address delivered before the summer meeting of the National Association of Accredited Commercial Schools, Chautauqua, N. Y.

Although we make it a constant aim to reach, at least once a month, thousands of seniors, and more frequently a list of thousands or more of the A-1 prospects, yet it is very seldom that the letters which we send carry a direct appeal to attend our school. Our appeals are mostly indirect. We tell interesting little stories concerning school life, success of our graduates, etc. In this manner, the high school senior becomes interested in our institution without scarcely being aware of it, without getting the idea that we are trying to force a business education as well as our school on him.

Let me urge you to maintain a high scholastic standard and keep the public school men acquainted with it. Christmas is a fine opportunity to show your appreciation of any cooperation on the part of officials and teachers. Money spent for this purpose is an investment yielding many returns. For example, a few years ago, before we adopted such a policy, we always encountered some difficulties in securing lists of high school seniors. It was necessary to mail from five to seven strong appeals to the high schools in our territory in order to receive by May 1 the senior names from 60% of the high schools. Last December when we made such a request to almost two hundred high schools, within a week 80% of them had replied and within a short time every name was in our office.

Let us now direct our attention to the pupils of the schools. How shall we appeal to them? I answer, by the same means that has made the high school of today so popular. Athletics, for both boys and girls, such as basketball, baseball, tennis, and similar sports. I believe that the greatest single force in popularizing Littleford School with the high school pupils has been our basketball team, which has promoted feelings of friendliness and good-will right in the high schools where it is most desired. There are other activities that may be likewise utilized. Such as the publication of a school paper by students, debating clubs, literary societies, music clubs, and similar student organizations. Occasional dances, parties, picnics, and other entertainments for your students add in building up a loyal spirit and may be used to serve as a drawing card, especially if students are allowed to invite their friends. On such occasions the school orchestra and glee club will do their share to bring the school to public notice. Wherever possible, public graduation exercises should be conducted, and with all these activities lose no opportunity to get your name in the news columns of the daily papers as often as possible.

A point that can not be emphasized too strongly, is clean, truthful advertising that can be lived up to. There have been far too many promises and too little service. This we find has been so true in some instances that the public school teachers have encouraged their pupils not to attend any business college.

Be careful in the employment of your teachers. It is not enough that they should be efficient. They must also be sympathetic, interested in those whom they instruct, and willing to assist students in attaining their ambitions. Then these must be backed by a highly efficient Employment Department, for after all, it is for a good position and start in business that the majority of young people attend our schools, so the better service you render in placing them in good positions the less the sales resistance when you come to sell tuition to their friends. Both principal and teachers should be on good terms with their pupils so as to develop a loyal school spirit that will exert its influence far beyond the four walls of the school room. Let us not forget that popularity with the school-going public will not be lasting unless it is built from the inside out and not vice versa.

Keep in close touch with your graduates. Encourage them to remain loyal to their school. Always remember that much of your future patronage depends on the way in which you treat those that were once your students.

Some time ago Mr. Charles Miller of New York suggested a national advertising campaign for the purpose of popularizing the profession. Mr. Miller, to use a popular expression, surely "hit the nail on the head." That's exactly what we need—a national advertising campaign to popularize the business school with the school-going public as well as the public in general. I trust the idea will be found worthy of acceptance and we will not adjourn without having first given some thought to Mr. Miller's timely suggestion.

Now, last but not least, let us hope that the day will soon come when our leading schools can be recognized and placed on the list of accredited institutions by the North Central Association of Colleges and Secondary Schools. This will probably do more to bring about our recognition quickly by the school-going public than any other one thing. When this is accomplished, we shall occupy the position in education to which the profession is entitled.

From the foregoing remarks it becomes obvious that, if any popularizing is to be done the burden of the work will fall on us. If there is any unpopularity, our methods or lack of methods are at fault. Our standards of scholarship and our terms of admission have been too lax, our eyes have been closed by our individual selfishness. Many of us are building only for the present without any thought of tomorrow. In a word, we have been mindful of our individual interests to such an extent as to make us unmindful of those of the profession as a whole.

What we need more than anything else is cooperation, and by this I mean not only cooperation on the part of the school-going public, but cooperation among ourselves. The truly healthful and wise advancement of our common interests can only be secured by

(*Concluded on page 25*)

EXERCISES IN BOOKKEEPING

Exercise No. 1*—Recording Transactions

(Single Proprietorship)

Feb. 1. Victor Mason began the wholesale carpet business, investing cash, $9,000.00.
1. Paid rent for the month, by check, $150.00.
1. Bought of Prescott & Welch, Trenton, N. J., on account, merchandise invoiced at $2,760.50.
2. Bought supplies for the office for cash, $40.00.
3. Bought office furniture, for cash, $225.00.
3. Gave Prescott & Welch a 10-day note, with interest, to apply on account, $750.00.
4. Sold Andrews & Co., city, 250 yds. wilton at $3.10; 300 yds. ingrain at 75c; terms, n/60.
4. Bought of the Nathan Burbank Co., New York City, an invoice of carpets, $1,579.55; terms, n/90.
7. Gave Prescott & Welch a check to apply on account, $500.00.
8. Sold Carey & Co., Augusta, Me., 100 yds. oilcloth at 65c; 400 yds. axminister at $3.40; terms, ½ 10-day note, balance n/30.
9. Sold J. C. Pomer, for cash, 40 yds. ingrain at 95c.
10. Paid telephone bill, by check, $3.10.
11. Bought of Carney Bros., Chicago, Ill., merchandise invoiced at $853.00; issued our 30-day note in payment.
13. Issued our check to Prescott & Welch for our note and interest due today.
14. Received of Carey & Co., to apply on account, their 30-day note, with interest, $100.00.
14. Drew a check for salaries to date, $114.00.
15. Received of Andrews & Co. ,to apply on account, a check for $300.00, and a note at 30 days for $250.00.
15. Gave the Nathan Burbank Co. a check on account, $675.00.
15. Proprietor withdrew cash for his personal use, $50.00.

INVENTORIES

Merchandise on hand, $3,619.29; rent paid in advance, $75.00; office supplies on hand, $32.00; office equipment valued at cost less 1%.

Required:

(a) Journalize, post, and take a Trial Balance.
(b) Make a Working Sheet, a Profit and Loss Statement, and a Balance Sheet.
(c) Make closing entries and post them.
(d) Close and rule the ledger, and take a proof Trial Balance.

Exercise No. 2†—Constructing a Balance Sheet

(Partnership)

From the Trial Balance of Baker & Peters on June 30, 1920, prepare a Balance Sheet as of June 30, 1920. Baker's proprietorship will be $6,788.00, and Peters' proprietorship $8,168.00.

The merchandise inventory on June 30, 1920, is $8,000.00. The loss on bad debts is estimated to be two percent of the accounts receivable outstanding. The depreciation on fixed assets is as follows:

Furniture and Fixtures ..... 10% of cost
Delivery Equipment ..... 20% of cost
Buildings ..... 5% of cost

(Trial Balance on following page)

*Taken from Essential Exercises in Bookkeeping by Leidner and Rittenhouse.

†Selected from McKinsey's Bookkeeping and Accounting, Volume I.

Baker & Peters
Trial Balance, June 30, 1920

Cash	$ 1,800.00	
Notes Receivable	300.00	
Accounts Receivable	3,200.00	
Merchandise Inventory, June, 1919	4,800.00	
Furniture and Fixtures	600.00	
Reserve for Depr. of Furniture and Fixtures		$ 120.00
Delivery Equipment	1,000.00	
Reserve for Depr. of Del. Equipment		200.00
Buildings	4,000.00	
Reserve for Depr. of Buildings		1,600.00
Land	2,000.00	
Notes Payable		1,400.00
Accounts Payable		2,600.00
J. W. Baker, Proprietor		6,000.00
J. W. Baker, Personal	220.00	
P. B. S. Peters, Proprietor		7,380.00
P. B. S. Peters, Personal	280.00	
Sales		36,000.00
Purchases	34,000.00	
Selling Expenses	1,240.00	
Administrative Expenses	1,860.00	
	$55,300.00	$55,300.00

Exercise No. 3*—Constructing a Balance Sheet and Statement of Profit and Loss

(A Corporation)

The Trial Balance of the American Mercantile Company, taken at the close of the fiscal period, December 31, 1923, shows the following account balances: Cash, Dr., $29,819.10; Notes Receivable, Dr., $3,800.00; Accounts Receivable, Dr., $36,800.00; Reserve for Doubtful Accounts Receivable, Cr., $110.00; Office Equipment, Dr., $1,750.00; Reserve for Depreciation of Office Equipment, Cr., $125.00; Store Fixtures, Dr., $4,000.00; Reserve for Depreciation of Store Fixtures, Cr., $300.00; Delivery Equipment, Dr., $4,500.00; Reserve for Depreciation of Delivery Equipment, Cr., $900.00; Buildings, Dr., $25,000.00; Reserve for Depreciation of Buildings, Cr., $500.00; Land, Dr., $15,000.00; Goodwill, Dr., $15,000.00; Notes Payable—Bank, Cr., $5,000.00; Notes Payable—Creditors, Cr., $1,500.00; Accounts Payable, Cr., $54,650.00; Mortgage Payable, Cr., $10,000.00; Capital Stock, Cr., $50.000.00; Surplus, Cr., $15,489.00; Sales Cr., $207,000.00; Sales Returns and Allowances, Dr., $3,500.00; 1922 Inventory, Dr., $18,990.40; Purchases, Dr., $140,000.00; Freight and Drayage In. Dr., $13,000.00; Buying Expense, Dr., $5,000.00; Selling Expense, Dr., $15,864.50; Delivery Expense, Dr., $9,100.00; Administrative Expense, Dr., $4,350.00; Interest Earned, Cr., $750.00; Purchases Discount, Cr., $1,000.00; Interest Cost, Dr., $600.00; Sales Discount, Dr., $1,150.00; Donations, Dr., $100.00.

The following adjustments are to be made:

(a) Merchandise Inventory, December 31, 1923, $15,754.90.

(b) Interest accrued on notes receivable, $70.00.

(c) Interest accrued on notes payable, $60.00. Unpaid wages: Buying Expense, $125.00; Selling Expense, $375.00; Delivery Expense, $75.00; Administrative Expense, $200.00.

(d) Office supplies on hand, $125.00; advertising supplies on hand, $300.00.
(Debit one account with Deferred Charges to Operation, and credit the expense accounts for these inventories).

(e) Reserves: Office Equipment, 5%; Store Fixtures, 7½%; Delivery Equipment, 10%; Buildings, 2½%; Doubtful Accounts Receivable, one-half of 1% of Accounts Receivable.

The student is required to prepare the following:

1. Adjusting entries for the inventories, accruals, and reserves,
2. A Working Sheet under date of December 31, 1923.
3. Journal entries to close the ledger, December 31, 1923.
4. Post-closing entries under date of January 1, 1924.
5. A Statement of Profit and Loss.

*Taken from Chapter 34 of "20th Century Bookkeeping and Accounting," 15th edition.

Exercise No. 4—Texas State Examination in Bookkeeping*

(Answer five questions, including numbers 4 and 6.)

1. (a) What is the effect of an endorsement in blank?
   (b) What is the object in conducting a business?
2. Distinguish between an accountant and an auditor.
3. What order should assets and liabilities take in the Balance Sheet? What reasons do you see for that order?
4. The Commercial Importing Company recorded the following transactions:

June 3. Sold J. L. Johnson merchandise on account.....$89.50.
5. Sold on account.....$32.75.
9. Sold on account.....$20.50.
10. Received cash on bill charged seven days before.....$75.00.
12. Sold on account.....$26.10.
19. Sold on account.....$32.50.
20. Received $13.40 in full for balance of bill charged seventeen days before.
26. Sold on account.....$36.23.
27. Received cash in full of bill charged twenty-two days before $32.75.
28. Sold on account.....$22.37.
30. Received on account.....$10.00.

Required:

(a) Construct all the books of original entry affected by any of these transactions and make the proper entries in each case.

(b) Construct the ledger and post to the proper accounts.

NOTE: Your efficiency in using the folio will have a great influence on your grade. (Value 40%.)

5. What distinction could be made between a draft and a check.
6. (a) Improvise your own material of not less than six transactions, affecting the cash account; construct that cash account properly ruled and balanced.
   (b) Name all other accounts affected by those same six transactions.
7. Explain a compound journal entry. What is the object of using them?

Exercise No. 5†—Depreciation

(C. P. A. Problem)

In your examination of the Automobile Delivery Truck account of a company, you find the following entries:

AUTOMOBILE TRUCKS

1922			1922		
Jan. 1.	Trucks 1, 2, 3, 4, @ $1200	$4,800.00	Aug. 1.	Truck 2	$ 900.00
July 1.	Truck 5	1,500.00	Sept. 1.	Truck 4	750.00
Aug. 1.	Truck 6	1,500.00	1.	Balance	6,150.00
		$7,800.00			$7,800.00

The reserve for Depreciation for Automobile Delivery Truck account stood credited on January 1, 1922, with $1,800.00.

Upon analyzing the transactions represented by these items you find the following facts:

(a) Truck 5 purchased July 1 replaced Truck 1. The portion of the reserve for depreciation accumulated on January 1 for Truck 1 amounted to $900.00. Truck 5 was purchased on open account.

(b) Truck 2 was traded in for $850.00 on the purchase of Truck 6 costing $1,500.00. The difference was paid in cash. The reserve which had been accumulating for depreciation on Truck 2 on January 1, amounted to $300.00.

(c) Truck 4 was totally destroyed in an accident September 1. The reserve for depreciation on this truck amounted, on January 1, to $300.00.

Assume the rate of depreciation to be 25% per year.

Give journal entries which would properly record the above facts and show the balances of all accounts affected, as of September 1, 1922.

NOTE—Five exercises are presented in this issue. Exercise No. 1 may be used as a test with elementary bookkeeping classes. Exercise No. 2 may be used as a test with intermediate bookkeeping classes. Exercise Nos. 3 and 4 may be used as a test with advanced bookkeeping classes. Exercise No. 5 may be used as a test with accounting classes.

*Furnished for publication in "The Balance Sheet through the courtesy of Sister M. Octavia, a teacher of commercial subjects in the Incarnate Word College, Alamo Heights, San Antonio, Texas.

†Taken from Chapter 10 of Sherwood's Public Accounting and Auditing, Volume I.

STATE TEACHERS' ASSOCIATIONS
DATES AND PLACES OF ANNUAL MEETINGS

Arizona
Place—Tuscon
Date—Thanksgiving week

Arkansas
Place—Little Rock
Date—November 8, 9, 10

California (Sectional Meetings)
Place—Oakland
Date—October 22–26
Place—Sacramento
Date—October 22–26
Place—Fresno
Date—November 26, 27, 28

Colorado (Sectional Meetings)
Place—Pueblo
Date—October 18–20
Place—Denver
Date—October 18–20
Place—Grand Junction
Date—October 16–20

Connecticut (Sectional Meetings)
Place—Hartford
Date—October 26
Place—New Haven
Date—October 26
Place—Bridgeport
Date—October 26
Place—Norwich
Date—October 26

Idaho
Place—Pocatello
Date—November 28–30

Indiana
Place—Indianapolis
Date—October 18, 19, 20

Iowa
Place—Des Moines
Date—November 1, 2, 3

Kansas (Sectional Meetings)
Place—Topeka
Date—October 18–20
Place—Salina
Date—October 18–20
Place—Wichita
Date—October 18–20
Place—Independence
Date—October 18–20

Louisiana
Place—Alexandria
Date—November 15, 16, 17

Maine
Place—Portland
Date—October 25, 26

Maryland
Place—Baltimore
Date—November 30, December 1

Michigan (Sectional Meetings)
Place—Detroit
Date—October 25, 26
Place—Bay City
Date—November 1, 2
Place—Lansing
Date—November 1, 2
Place—Kalamazoo
Date—October 29, 30
Place—Traverse City
Date—October 29, 30
Place—Alpena
Date—October 25, 26

Minnesota
Place—St. Paul
Date—November 1, 2, 3

Montana (Sectional Meetings)
Place—Miles City
Date—October 18, 19, 20
Place—Great Falls
Date—October 18, 19, 20
Place—Butte
Date—October 18, 19, 20

Nebraska (Sectional Meetings)
Place—Omaha
Date—October 31, November 1, 2, 3
Place—Lincoln
Date—October 31, November 1, 2, 3
Place—Kearney
Date—October 31, November 1, 2, 3
Place—Holdrege
Date—October 31, November 1, 2, 3
Place—Scottsbluff
Date—October 31, November 1, 2, 3

New Hampshire
Place—Laconia
Date—October 19, 20

North Dakota
Place—Bismarck
Date—November 21–24

Rhode Island
Place—Providence
Date—October 25, 26, 27

South Dakota
Place—Watertown
Date—November 26–28

Texas
Place—Fort Worth
Date—November 29, 30, December 1

Utah
Place—Salt Lake City
Date—October 25, 26, 27

Vermont
Place—Montpelier
Date—October 18, 19, 20

Virginia
Place—Richmond
Date—Thanksgiving week

Washington
Place—Seattle
Date—October 24, 25, 26

West Virginia
Place—Wheeling
Date—November 29, 30, December 1

Wyoming
Place—Douglas
Date—October 10, 11, 12

CURRENT NEWS

Graduating Class,
Spencerian Commercial School.

The Spencerian Commercial School, Louisville, Kentucky, held graduation exercises in the Auditorium of the Boys' High School, Friday evening, June 22, 1923. The commencement address was delivered by P. H. Callahan, President of the Louisville Varnish Company, who is himself a graduate of the Spencerian School, Cleveland, Ohio.

Reproduction of the above photograph in "The Balance Sheet" was made possible through the courtesy of R. H. Lindsey, President of the Spencerian Commercial School of Louisville. In his letter, which accompanied the photograph, he states that 246 students were graduated during the year ending June 30, 1923. Many of these do not appear in the photograph, because for various reasons they were prevented from being present.

L. D. Thomas, formerly with the Douglas Business College at McKeesport, Pennsylvania, has purchased and is now operating the Douglas Business College at Connellsville, Pennsylvania. His wide experience in business college work has prepared him for successfully managing a business school and there is no doubt but that the Douglas Business College at Connellsville will thrive under his supervision and management.

E. Jane Gilliland is a new commercial teacher in the High School at Oil City, Pennsylvania. Miss Gilliland is a graduate of the Grove City College, Grove City, Pennsylvania, and during the past year taught commercial subjects in the High School at Tyrone, Pennsylvania.

W. M. Dowden, President of the Lansing Business University, reports that he has leased a building located at the corner of Capitol and Ionia Streets, Lansing, Michigan, for his school. The building is to be rebuilt in such a manner as to make it a model of modern educational architecture. The building is of fireproof construction and is ideally constructed for school use. The administrative offices and class rooms for the teaching of stenographic and business practice courses will be located on the first floor, while the second floor will be devoted exclusively to the commercial and accountancy courses. Mr. Dowden says that they are starting the new school year with a larger enrollment than last year.

E. G. Knepper, formerly principal of the Normal Training Department of Bliss College, Columbus, Ohio, has recently accepted an appointment as head of the Commerce Department in the State Normal School, Bowling Green, Ohio. He is a graduate of the Ohio State University with A. B. and B. Sc. degrees in education. Mr. Knepper is well known throughout the state because of the acquaintances formed through his training of commercial teachers at Bliss College, and is well equipped for his work in the State Normal School.

Anna M. E. Cornell is a new teacher of stenographic subjects in the Lorain Business College, Lorain, Ohio. She is a graduate of the High School at Carsonville, Michigan, and also of the Port Huron Business University, Port Huron, Michigan.

J. Donielson Cooper has been elected as the teacher of commercial subjects in the High School at Angola, Indiana. He is a graduate of the Belding, Michigan High School and received his normal training in the University of Michigan, Ann Arbor, and the Western State Normal School, Kalamazoo, Michigan.

D. P. McDonald, President of the Bryant & Stratton Business College, Louisville, Kentucky, reports that they have moved into their new building, which is located at Fifth and Jefferson Streets. The new quarters were designed exclusively for the Bryant & Stratton Business College and provide an increase of 25 percent in floor space. The fact that it has been necessary to secure larger quarters indicates an increasing enrollment.

Beulah M. Potts is now teaching commercial subjects in the High School at Watertown, South Dakota. Miss Potts is a graduate of the State Teachers' College, St. Cloud, Minnesota. During the past year she taught in the High School at Marshall, Minnesota.

There was organized at the State Teachers' College at Kirksville, Missouri, in the spring an honorary fraternity for intending teachers of commerce. It was named **Pi Omega Pi** and hopes to become a national fraternity with branches or chapters in various teachers colleges. Only persons who stand high in their grades are eligible to membership. This fall the fraternity is holding its meetings at the luncheon hour once every two weeks much after the fashion of business men's clubs, such as Kiwanis and Rotary.

W. A. Walsh has accepted a position as teacher of commercial subjects in the High School at Springfield, Ohio. For the past four years he has been connected with the Sam Houston High school, El Paso, Texas. Mr. Walsh is a graduate of the Bowling Green Business University, Bowling Green, Kentucky.

Hulda G. Moen is now teaching commercial subjects in the High School at Spring Valley, Minnesota. For the past two years she was connected with the High School at Canby, Minnesota. Miss Moen is a graduate of the High School at Cashton, Wisconsin, and of the State Normal School, Whitewater, Wisconsin.

R. H. Whitten, President of the Woodbury Business College, Los Angeles, California, reports that on July 19, 1924, they expect to be located in a new four story building, which with the exception of the ground floor will be occupied entirely by the school. Mr. Whitten says the new building will enable them to accommodate an enrollment of a thousand students in day school. His plans are to enter the new building on the fortieth birthday of the school.

Roxie M. Channell, last year a teacher of commercial subjects in the High School at Glouster, Ohio, is now teaching stenographic subjects in the High School at Xenia, Ohio. Miss Channell is a graduate of Wilmington College, Wilmington, Ohio, with a B. S. degree.

W. S. Sanford, Principal of Brown's Business College, located at Easton and Blackstone Aves., St. Louis, Missouri, reports that the fall enrollment has been the greatest in numbers since this school was opened. Mr. Sanford has been Principal of the school for the past three years. He was formerly Secretary and Registrar of Union Christian College, Merom, Indiana.

Bertha Roseberry of Kirksville, Missouri, is teaching commercial subjects in the newly constituted commercial department of the Macon, Missouri, High School.

W. L. Shultz, formerly with the High School at Shickshinny, Pennsylvania, is now teaching commercial subjects in the High School at DuBois, Pennsylvania. Mr. Schultz is a graduate of the High School at Jerseytown, Pennsylvania, and of the Bloomsburg State Normal School, Bloomsburg, Pennsylvania.

(*Concluded on page 25*)

(*Continued from page 12*)

GENERAL LEDGER CONTROL

1922			1922		
Dec. 31	Finished Goods (10)..	$517,706.00	Jan. 1	Balance.....	$240,892.36
	Balance.....	249,579.98	Dec. 31	Raw Material (1)....	160,832.90
				Payroll (2).....	251,587.50
				Factory Overhead (3)	37,773.22
				Management Exp. (4)	76,200.00
		$767,285.98			$767,285.98
				Balance.....	$249,579.98

MANUFACTURING CORPORATION

Trial Balance — Factory Ledger

December 31, 1922

Raw Material	$ 32,435.06	
Payrolls		$ 2,495.64
Goods in Process	134,383.36	
Factory Overhead	16,878.04	
Management Expense	25,353.32	
Finished Goods	43,025.84	
General Ledger Control		249,579.98
	$252,075.62	$252,075.62

POPULARIZING THE PRIVATE BUSINESS COLLEGE

(*Continued from page 18*)

the heartfelt and sincere interest and judicious efforts of all concerned; and while something may be done by each of us individually, nothing short of the harmonious and cheerful cooperation of all can secure the richest and fullest blessings. "WE RISE OR FALL AS ONE."

Just before George Jacob Holyoake died, in 1906, in his ninetieth year, he said that of all the reforms, political, religious, social, and educational that he had been connected with in over seventy years of an agitator's life, cooperation was by far the most important. Let us learn from that great reformer! Let us make cooperation our watchword! More than that. Let us obliterate all stigmata now resting on some of our private business schools, or legislate them out of the profession.

Dr. Frank P. Graves, of the University of Pennsylvania, says in his History of Education (page 423) that in the United States commercial training began through private enterprises with classes in bookkeeping, and later with "business colleges," but that Despite the name of the latter, the course is narrow and is generally shaped by pecuniary aims. This statement may be somewhat exaggerated; still, it is not wholly unfounded. If there is any vestige of mere mercenary aims in our efforts, let us cast them aside and adopt a higher and better maxim, that of rendering the best service at the lowest possible cost! Let us learn the full truth of the slogan adopted by the Rotary Clubs of the world, that "He profits most who serves best."

NEWS FROM THE PACIFIC COAST

C. B. Read, who was recently reported as going to Spokane, Washington, for this year, will return to Douglas, Arizona, as head of the Commercial Department.

T. L. Nelson is a new commercial teacher in the High School at Alameda, California, this year. After graduating from the University of California, Mr. Nelson spent several years in South America.

Ida Montgomery has accepted a position in the Alturas High School this year as head of the Commercial Department.

Beatrice Rice, last year connected with the Alturas High School, is teacher of commercial subjects in the High School at Redding, California, for this year.

E. G. Gridley, formerly head of the Commercial Department in the Oakland High School, Oakland, California, is now head of the Commercial Department in the University High School at Oakland.

K. F. Adams, formerly Principal of the Lincoln High School at Seattle, Washington, is the new Superintendent of Schools at Santa Cruz, California.

Margaret Rees, formerly at Lone Pine, California, is now teaching in the Union High School at Big Pine, California.

Leon B. Losey and **Mrs. K. A. Aplington** are new teachers in the Yakima Valley Academy, Yakima, Washington.

ERROR

LAST MONTH WE ANNOUNCED 600 NEW ADOPTIONS OF "20TH CENTURY BOOKKEEPING AND ACCOUNTING." THIS NUMBER WAS BASED UPON NEW ADOPTIONS UP TO SEPTEMBER 1—PUBLICATION DATE OF THE BALANCE SHEET.

THE NUMBER OF NEW ADOPTIONS OF "20TH CENTURY BOOKKEEPING AND ACCOUNTING" FOR THE SCHOOL YEAR, BEGINNING SEPTEMBER, 1923, HAS NOW (SEPTEMBER 25, 1923) REACHED A TOTAL OF

821

THIS INCLUDES ADOPTIONS ONLY BY SCHOOLS THAT HAVE NEVER BEFORE USED THE SYSTEM. THOSE SCHOOLS THAT HAVE BEEN USING IT ARE STILL DOING SO—MORE THAN

6000

SOUTH-WESTERN PUBLISHING CO.

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104 FIFTH AVE.
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542 S. DEARBORN ST.
CHICAGO, ILL.

Notices from schools needing teachers, teachers available for positions, schools for sale, or persons desiring to purchase a school, will be inserted on this page free of charge.

Answers to classified advertisements appearing on this page should be addressed in care of "The Balance Sheet," 309 W. Third St., Cincinnati, Ohio, unless otherwise indicated in the advertisement.

POSITIONS WANTED

Position wanted by a strong commercial teacher of 19 years' experience, capable of handling large classes in Penmanship, Bookkeeping, Commercial Law, Banking, Rapid Calculation, Salesmanship, etc. Address, S. A.

Position wanted by man and wife, well qualified to teach all commercial subjects. Expert penman. Prefer the East or South. Reasonable salary expected. Address, No. 43.

Manager of large well known business school is interested in a change or taking over a good school where there will be opportunity for expansion and growth. He is married, wide awake and progressive; well equipped by education and experience; a builder, organizer and live-wire. Present salary and bonus in excess of $3,000. Address, No. 45.

SCHOOLS FOR SALE

Well-established school in Maine of good reputation in a well located city. Can be conducted by two people. Equipment first class. Here is a fine opportunity for the right party. Last year's income over $7,000.00. Expenses low. Poor health, reason for selling. Will sacrifice for cash at a price below inventory cost. Do not answer unless you mean business. Address, B. A.

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